

# **NORTH CANTON DRINKING WATER QUALITY REPORT FOR 2011**

The City of North Canton has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report are general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts.

## **Source Water Information (141.453)(b)**

The City of North Canton receives its drinking water from nine ground water wells. The North Canton Water Treatment Plant also has an emergency connection with the Canton Water System and Aqua Ohio Water System of Massillon.

## **What are sources of contamination to drinking water? (141.153)(b)(1)**

The sources of drinking water both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases, radioactive material; and water can pick up substances resulting from the presence of animals or from human activity.

## **Contaminants that may be present in source water include:**

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally - occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems; and FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (1-800-426-4791).

## **Who needs to take special precautions? (141.154)**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as individuals with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## **About your drinking water (141.153)(d)**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of North Canton Drinking Water Plant is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at <http://www.epa.gov/safewater/lead>.

The EPA requires regular sampling to ensure drinking water safety. The City of North Canton conducted sampling for the following contaminants: bacteria, inorganics, synthetic organics, radioactive substances, and volatile organics. Samples were analyzed for different contaminants, most of which were not detected in the City of North Canton water supply. The Ohio EPA requires us to

monitor for some contaminants less often than once per year because the concentrations of these contaminants do not change frequently. Consequently, some of our data, though accurate, are more than one year old.

#### **How do I participate in decisions concerning my drinking water? (141.153)(h)(4)**

Public participation and comment are encouraged at regular meetings of City Council, which meets the second and fourth Monday of each month. Call the Council office (330) 499-3986 for further information on Council meetings.

**For more information on** your drinking water contact Rich Steinhebel, Superintendent of the North Canton Water Treatment Plant. Mr. Steinhebel is available to answer any questions you may have about your water and is available weekdays from 7 a.m. to 4 p.m. at (330) 499-6473. You can also call the local office of the Ohio Environmental Protection Agency at (330) 963-1200 with any water questions.

#### **HOW TO READ THIS REPORT**

The City of North Canton is required to provide this annual report on drinking water quality to every North Canton water customer. The Environmental Protection Agency (EPA) requires regular sampling to ensure drinking water safety and the results of testing those samples are in this report. In addition, since it is your water system and you pay for it, we believe you should understand where the water comes from, how it is processed and transported to you, and what the city is doing to make certain the system is not only safe, but reliable.

As you read this report, please note that the chemicals listed are at detection levels. None of the levels is in violation of EPA standards. We test more frequently than required so that when we detect any elevation in levels, we can take action immediately to correct it.

#### **WHERE YOUR WATER COMES FROM**

The City of North Canton is a ground water system.

#### **Definitions of some terms contained within this report. (141.153)(c)**

**First Tap:** First entry point from treatment plant into the system.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Parts per Million (ppm) or Milligrams per Liter (mg/L):** units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

**Parts per Billion (ppb) or Micrograms per Liter (ug/L):** units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

**"<" symbol:** a symbol which means "less than." A result of <5 means that the lowest that could be detected was 5 and the contaminant in that was not detected.

#### **ND**

**Non-detection of chemicals tested for.**

#### **NR**

**Not Required**

#### **AL**

**Action Level** – Requires action be taken if concentration of contaminant exceeded the **AL** level. The action could be different types of testing and require increased treatment methods.

# CONSUMER CONFIDENCE REPORT

## TEST RESULTS

### VOLATILE ORGANIC COMPOUNDS

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
01/11/2011	Regulated PPB	NO	0	80	ND	ND	Discharge from industrial facilities: byproducts of drinking water chlorination
01/11/2011	Chloroform PPB	NO	0	Unreg.	1.70	<0.5 to 1.70	
01/11/2011	Bromodichloromethane PPB	NO	0	Unreg.	3.70	<0.5 to 3.70	
01/11/2011	Dibromochloromethane PPB	NO	0	Unreg.	5.70	<0.5 to 5.70	
01/11/2011	Bromoform PPB	NO	0	Unreg.	2.90	<0.5 to 2.90	

### DISINFECTION BYPRODUCTS

#### TOTAL TRIHALOMETHANES

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
07/13/2011	T. Trihalomethanes PPB	NO	0	80	38.2	3.5 to 15.9	Byproduct of drinking water chlorination

#### HALOACETIC ACIDS (FIVE) (HAA5)

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
07/13/2011	T. HAA5 PPB	NO	0	60	6.2	1.9 to 4.3	Byproduct of drinking water disinfection

### RADIOACTIVE SUBSTANCES (PCI/L)

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
06/09/2010	Gross Alpha PCI/L	NO	0	15	ND	< 3	
06/09/2010	Gross Beta PCI/L	NO	0	AL50	ND	< 3	
06/09/2010	Radium 228 PCI/L	NO	0	5	1.4	< 1	

### RADIOACTIVE SUBSTANCES (PCI/L) NEW WELL IN OPERATION FOUR QUARTERS

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
12/08/2010	Gross Alpha PCI/L	NO	0	15	ND	ND to 9.34	Certain minerals, which can be naturally occurring or the results of oil and gas production and mining activities; are radioactive and may emit forms of radiation known as protons and beta radiation.
03/09/2011	Gross Alpha PCI/L	NO	0	15	5.99	ND to 9.34	
06/08/2011	Gross Alpha PCI/L	NO	0	15	9.34	ND to 9.34	
09/14/2011	Gross Alpha PCI/L	NO	0	15	ND	ND to 9.34	
12/08/2010	Gross Beta PCI/L	NO	0	AL50	ND	ND to 17.3	
03/09/2011	Gross Beta PCI/L	NO	0	AL50	6.72	ND to 17.3	
06/08/2011	Gross Beta PCI/L	NO	0	AL50	17.3	ND to 17.3	
09/14/2011	Gross Beta PCI/L	NO	0	AL50	ND	ND to 17.3	
12/08/2010	Radium 228 PCI/L	NO	0	5	ND	ND	
03/09/2011	Radium 228 PCI/L	NO	0	5	ND	ND	
06/08/2011	Radium 228 PCI/L	NO	0	5	ND	ND	
09/14/2011	Radium 228 PCI/L	NO	0	5	ND	ND	
12/08/2010	Radium 226 PCI/L	NO	0	5	NR	NR	
03/09/2011	Radium 226 PCI/L	NO	0	5	ND	ND	
06/08/2011	Radium 226 PCI/L	NO	0	5	ND	ND	
09/14/2011	Radium 226 PCI/L	NO	0	5	NR	NR	

### SYNTHETIC ORGANIC CHEMICALS

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
06/09/2009	Alachlor PPB	NO	0	2	ND	< 0.20	Runoff from herbicide used on row crops
06/09/2009	Atrazine PPB	NO	3	3	ND	< 0.20	
06/09/2009	Simazine PPB	NO	4	4	ND	< 0.20	

### TOTAL CHLORINE RESIDUAL

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
2011	Annual Average PPM	NO	4	4	0.92	0.86 to 1.05	Product of drinking water disinfection

### MICRO-ORGANISMS: Total Coliforms (Including fecal coliform and E. Coli)

Sample Date	Contaminant (Units)	Violation	MCL	Results	Required Test	Completed Test	Typical Source Contaminants
2011	Total Coliforms P/N	NO	TT4/TT5	ND	25 Per Month	30 Per Month	Not a health threat in itself; it is used to indicate whether other potentially harmful bacteria may be present. Coliforms are naturally present in the environment; as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste.

# CONSUMER CONFIDENCE REPORT

## TEST RESULTS

### INORGANIC SUBSTANCES

Sample Date	Contaminant (Units)	Violation	MCLG	MCL	Results	Detection Range	Typical Source Contaminants
06/09/2010	Fluoride PPM	NO	4	4	0.80	0.20 >	Erosion of natural deposits; water additive
2011	Fluoride PPM	NO	4	4	0.99	0.95 to 1.04/month	that promotes strong teeth
2011	Lead 30 Samples PPB	NO	0	15	None > AL	ND to 6.5	Corrosion of household plumbing systems
2011	Copper 30 Samples PPB	NO	0	1300	None > AL	ND to 34	and erosion of natural deposits
06/08/2011	Nitrate, Nitrate-Nitrite PPM	NO	10	10	0.12	< 0.10 to 0.12	Animal waste and agricultural uses; may
06/08/2011	Nitrite PPM	NO	10	10	ND	< 0.10	be naturally occurring
06/09/2010	Arsenic Total PPB	NO	0	10	ND	< 0.6	Erosion of natural deposits; runoffs from orchards; runoffs from glass and electronics production waste
06/09/2010	Antimony Total PPB	NO	6	6	ND	< 0.8	A naturally occurring trivalent or pentavalent metalloid used as a constituent of metal in the manufacture of flame retardants, ceramics, glass, pesticides, and tin-antimony solder, as well as in medicine
06/09/2010	Beryllium Total PPB	NO	4	4	ND	< 0.2	An alkaline-earth metal. In nature, beryllium is found in the ores of beryl. Beryllium has various industrial uses
06/09/2010	Barium Total PPB	NO	2000	2000	49.7	< 100	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
06/09/2010	Cadmium Total PPB	NO	5	5	ND	< 0.2	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
06/09/2010	Chromium Total PPB	NO	100	100	ND	< 1.0	Discharge from steel and pulp mills; erosion of natural deposits
06/09/2010	Cyanide Total PPB	NO	200	200	ND	< 10	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
06/09/2010	Mercury Total PPB	NO	2	2	ND	< 0.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and crop lands
06/09/2010	Nickel Total PPB	NO	100	100	ND	< 1.0	A metallic element used in alloys; in electroplated protective coatings; in alkaline storage batteries, and as a catalyst
06/09/2010	Thallium Total PPB	NO	2	2	ND	< 0.30	A metallic element with miscellaneous industrial uses, including in mercury alloys, rodenticides, and photoelectric applications. Thallium is regulated by the US Environmental Protection Agency. See also rodenticide.
06/09/2010	Selenium Total (PPB)	NO	50	50	ND	< 1.0	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines